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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/776,749

02/11/2004

Ronald S. Cok

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11/01/2005

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EXAMINER

PATEL, ASHOK

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/776,749

Applicant(s)

COK, RONALD S.

Examiner

Ashok Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/13/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-71 is/are pending in the application.
- 4a) Of the above claim(s) 54-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>021104</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's election with traverse of Group I, claims 33-53 in the reply filed on 07/13/2005, is acknowledged. The traversal is on the ground(s) that the presently claimed solid state area illumination light source and lighting fixture are specifically disclosed and described for use together. While the Examiner does not disagree with applicant in this matter, the Examiner maintains his alternative position with respect to the election of species.

The Examiner modifies previous restriction requirement to replace paragraph numbers 1 and 2 with the following paragraph numbers 2 and 3.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 33-53, drawn to a solid state-area illumination light source, classified in class 313, subclass 512.
- II. Claims 54-71, drawn to a lighting fixture, classified in class 362, subclass 84.

3. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require

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the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the claimed lighting source does not require solid state are illumination light source of claim 33, which includes specifically recited: (1) a planar flexible substrate, (2) a flexible organic light emitting diode, (3) a flexible encapsulating cover and (4) first and second conductors, as specifically recited in claim 33. The subcombination has separate utility such as: (1) a stand-alone lamp, which does not need a lighting fixture, or (2) a display sign (such as EXIT sign), or (3) a traffic signal lamp, a glow lamp etc.

The Examiner still maintains requirement of the alternative election of species issued in the previous office action. An action on merits including elected claims 33-53 appears below.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been

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obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 33 and 35-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota et al (USPN 5,013,967).

Hirota et al disclose applicant's claimed solid-state area illumination light source (Figures 1-3, 5-7, 9-13) including:

- a) a planar flexible substrate (11) col. 4, lines 37-47);
- b) an organic light emitting diode (OLED) layer (12, 14, 15) deposited on the flexible substrate, the organic light emitting diode layer including first and second electrodes (12, 15) for providing electrical power to the OLED layer;
- c) a flexible encapsulating cover (17, col. 4, line 64-col. 5, line 12) covering the OLED layer;
- d) first and second conductors (13 or 23) electrically connected to the first and second electrodes, and extending beyond the encapsulating cover for making electrical contact to the first and second electrodes by an external power source; and
- e) wherein the light source is packed in a planar configuration.

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Hiroataka et al differs from applicant's claimed light source in that Hiroataka et al does not disclose the organic light emitting diode layer being flexible, as claimed by applicant.

However, providing flexible organic light emitting diode layer would have been obvious to one of ordinary skill in the art for easing the assembly during manufacturing of the device.

Therefore, it would have been obvious to one of ordinary skill in the art to provide Hiroataka et al's light source including flexible organic light emitting diode layer for easing the assembly during manufacturing of the device.

As to claims 35 and 36, Hiroataka et al disclose a body portion (main portion) and a tab portion (see Figures 5, 7, 8b for example), wherein the first and second conductors (13, 23) are located on the tab portion. The tab portion could be interpreted as for featuring orientation of the light source in a socket.

As to claims 37 and 38, although Hiroataka et al do not disclose specific design of the tab portion for connecting the first and second conductors, it would have been obvious to one of ordinary skill in the art to provide the tab portion of any suitable convenient and alternative shape for connecting arrangement to provide power source to the device.

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As to claims 39 and 40, Hirotaka et al disclose the first and second conductors located on one side of the light source as shown in almost all Figures. However, it would have been obvious to one of ordinary skill in the art to provide the tabs in any suitable alternative configuration for connecting the power source to the device.

As to claim 41, Hirotaka et al disclose emission of the light from one side of the substrate, as claimed by applicant. Hirotaka et al do not disclose the first and second conductors located on opposite side. However, providing the conductors in any suitable configuration would have been obvious to one of ordinary skill in the art for facilitating connection of the power source to the device.

As to claim 42, Hirotaka et al does not disclose the encapsulating cover as a coated layer. However, providing the encapsulating cover in any suitable and desired form would have obvious to one of ordinary skill in the art for enclosing the OLED structure.

As to claim 43, Hirotaka et al disclose the OLED layer continuous over the substrate.

As to claim 44, 45 Hirotaka et al disclose the light source operating on a standard power (col. 9. lines 60-63).

As to claim 46, Hirotaka et al disclose the support (substrate) being transparent.

As to claim 47, Hirotaka et al does not disclose the substrate being transparent. However, depending upon direction of the light, the substrate could be made transparent to emit from the substrate. In light of this, applicant's claimed transparent substrate would have been obvious to one of ordinary skill in the art for emitting the light from the substrate.

As to claim 48, Hirotaka et al disclose the transparent encapsulating cover (col. 5, lines 6-13).

As to claim 49, Hirotaka et al does not disclose the device including a reflective layer for reflecting the light. However, providing the reflective layer would have been obvious to one of ordinary skill in the art for reflecting the emitted light in a desired direction. In light of this, Hirotaka et al would have suggested to provide the reflective layer in his device for reflecting the emitted light in a desired direction.

As to claim 50, Hirotaka et al does not disclose both the substrate and the encapsulating cover being transparent. However, depending upon direction of the light, the substrate and the encapsulating cover could be made transparent to emit from both the substrate and the encapsulating cover. In light of this, applicant's claimed transparent substrate and

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encapsulating cover would have been obvious to one of ordinary skill in the art for emitting the light from both the substrate and the encapsulating cover.

As to claims 51, 52, Hirotaka et al disclose the light source having a rectangular or elongated shape (as shown in almost all Figures).

6. Claims 34 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirotaka et al (USPN 5,013,967) in view of Goodrich (USPN 5,162,696).

Hirotaka et al does not disclose a plurality of light sources in a planar configuration. However, providing the device in its plural form is known in the art by simply cascading (repeating) same device, as evidenced by Goodrich for providing plural units.

Therefore, it would have been obvious to one of ordinary skill in the art to provide Hirotaka et al's light source in plural form by cascading (repeating) the same device, as suggested by Goodrich for providing plural units.

As to claim 53, Hirotaka et al does not disclose the light source having a shape of a ring segment, as claimed by applicant. However, it is known in art to provide ring shaped segments as an alternative shaped design, as evidenced by

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Goodrich. Therefore, Hiroataka et al would have suggested to one of ordinary skill in the art to provide his light source in a ring segmented shape, as an alternative design. It is to be noted that applicant's claimed ring shaped segments does not solve any particular problem that is not solved by the prior art light source. Therefore, applicant's ring segment shaped light source would have been a matter of design choice to one of ordinary skill in the art.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Calamia et al and McCormick et al each are cited for showing a general structure of a solid state illumination light source.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ashok Patel
Primary Examiner
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